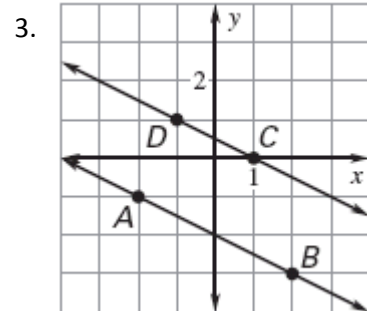
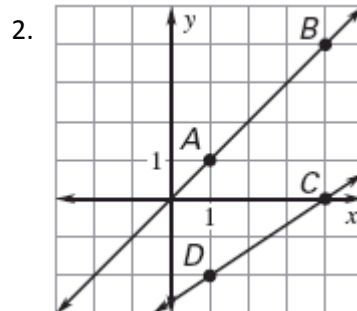
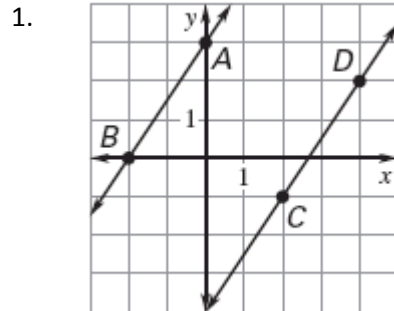


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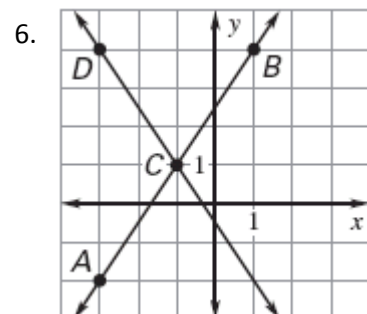
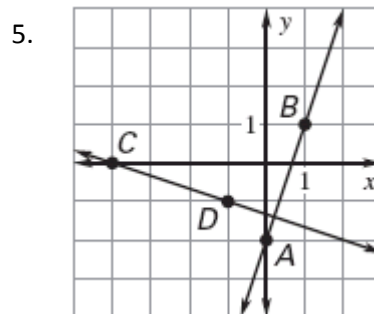
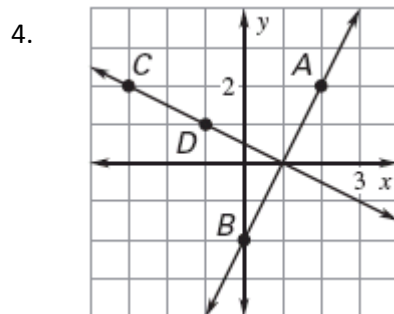
Date _____

201 3.4 and 3.5 Extra Practice

Find the slope of each line. Are the lines parallel?



Find the slope of each line. Are the lines perpendicular?



Tell whether the lines through the given points are *parallel*, *perpendicular*, or *neither*.

7. Line 1: $(-1, 2), (2, 3)$
Line 2: $(0, 0), (3, 1)$

8. Line 1: $(0, 1), (1, 3)$
Line 2: $(4, -1), (5, 2)$

9. Line 1: $(-5, 0), (-3, -2)$
Line 2: $(-2, 2), (0, 4)$

Tell whether the intersection of \overleftrightarrow{AB} and \overleftrightarrow{CD} forms a right angle.

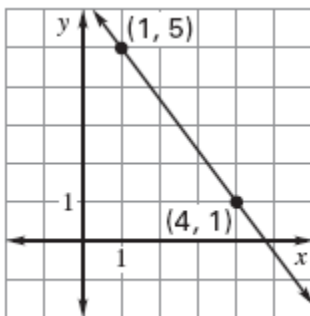
10. $A(-8, 3), B(1, 2), C(0, 9), D(-1, 0)$

11. $A(3, 2), B(5, 10), C(7, -4), D(3, -3)$

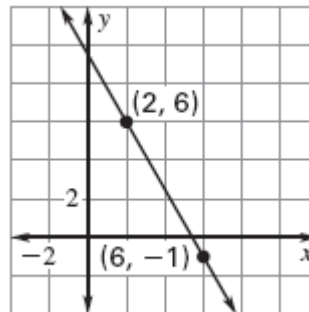
12. $A(5, 4), B(-3, 20), C(9, -2), D(6, 4)$

Write an equation of the line shown.

13.



14.



Write an equation of the line that passes through the given point P and has the given slope m .

15.

$P(3, 4); m = 4$

16.

$P(5, -2); m = -3$

17.

$P(-3, 2); m = \frac{1}{3}$

Write an equation of the line that passes through point P and is parallel to the line with the given equation.

18. $P(6, -1); y = 3x + \frac{3}{4}$

19. $P\left(\frac{5}{3}, \frac{11}{4}\right) y = -\frac{6}{5}x + 4$

Put #19 in standard form.

Write an equation of the line that passes through point P and is perpendicular to the line with the given equation.

20. $P(-4, -4)$; $y = -2x + 1$

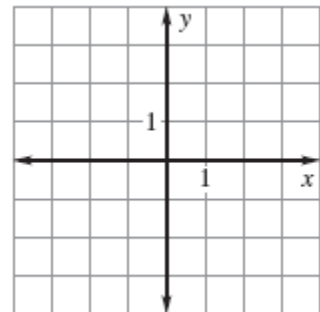
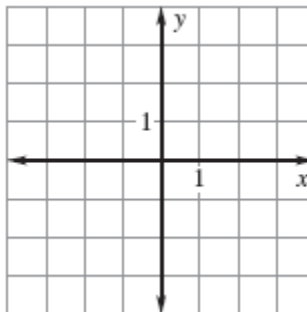
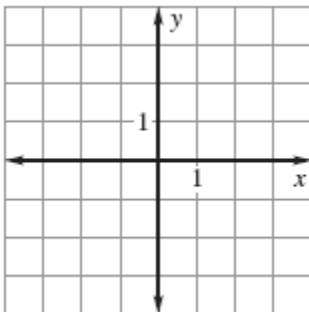
21. $P(2, -3)$; $y = -4x - 5$

Graph the equation.

22. $2x + 4y = 3$

23. $x + 3y = 4x - 2$

24. $x - 2y = y + 5$



25. Find the equation of the perpendicular bisector of \overline{PQ} . $P(-2, 8)$ $Q(6, 6)$